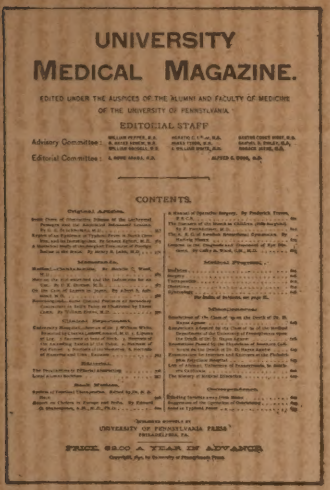

UNIVERSITY
MEDICAL MAGAZINE.

EDITED UNDER THE AUSPICES OF THE ALUMNI AND FACULTY OF MEDICINE OF THE UNIVERSITY OF PENNSYLVANIA.

EDITORIAL STAFF

Advisory Committee: WILLIAM PEPPER, M.D., HENRY C. LEA, M.D., AUSTIN FLINT, M.D., WILLIAM GOODELL, M.D., J. COLLINS WARREN, M.D., HORACE HOWE, M.D.

Editorial Committee: A. HOWE HINSDALE, M.D., ALFRED S. ROSS, M.D.

CONTENTS.

PUBLISHED MONTHLY BY
UNIVERSITY OF PENNSYLVANIA PRESS
PHILADELPHIA, PA.

PRICE, $2.00 A YEAR IN ADVANCE.

MAY, 1896

CASES OF ARTIFICIAL ANUS AND FECAL FISTULE TREATED BY INTRAPERITONEAL OPERATION.

BY JOHN B. ROBERTS, M.D.,

PHILADELPHIA.

CASES OF ARTIFICIAL ANUS AND FECAL FISTULE TREATED BY INTRAPERITONEAL OPERATION.[1]

By John B. Roberts, M.D.,

Philadelphia.

Intestinal Resection for Artificial Anus.

A man, aged 67, was admitted to the Methodist Hospital on November 21, 1895, with strangulated inguinal hernia of the right side. He had suffered from this hernia for about forty years, and it had previously been operated upon twice because of the occurrence of strangulation.

Upon examination it was found that he had a small hernia on the left side and a large inguino-scrotal hernia of the right side which was strangulated. I promptly cut down upon the hernia, relieved the strangulation, and did an operation for the radical cure by the method of Bassini. The hernia consisted of the entire cecum, which showed a dimple-like depression at one point, evidently representing the appendix, which was congenitally absent. Subsequent investigation from the surgeons, who had operated upon him previously, proved that his appendix had never been removed, and that his case was therefore one of congenital absence of the organ. There were a good many old adhesions uniting the coils of intestine in the neighborhood of the cecum.

The patient showed very little shock after the operation, and did well for one day, when his abdomen became somewhat tympanitic and painful. The next day the pain and tympany had increased, and vomiting occurred, when attempts were made to have his bowels moved by sodium phosphate. I determined to make an incision in the median line because it was evident that there was an obstruction in the intestinal canal.

Active peritonitis was present and a portion of the small intestine just above the ileo-cecal valve was found to be dark in color, as if it had just been pulled from some encircling constriction. It was very evident that this portion of intestine, which was about two inches long, had been strangulated by being entangled in some of the twisted masses of adherent coils resulting from the previous attacks of inflammation.

This bowel was so dark and the activity of the peritoneal inflammation so great that I made an incision into it and allowed a large

[1] Read before the Philadelphia County Medical Society, March 25, 1896.

quantity of feces and gas to be expelled. Being afraid to put this dark and gangrenous-looking bowel into the abdomen, I stitched the knuckle of intestine to the centre of the incision. The opening through which I had permitted the evacuation of feces was pinched shut with a hemostatic forceps, and the wound above and below the protruding bowel closed with sutures. Before doing this I also punctured the intestines within the abdomen in another place with the aspirating needle, to allow the escape of gas, and closed the opening with sutures. After the intestine had been stitched to the abdominal wall I found that it had regained its normal color. This showed that the gut would probably not have become gangrenous at this point, and could have been returned, though it is questionable whether such a proceeding would have been wise when the distention and violence of the peritoneal inflammation were so great.

Inflammation of the belly wall around the protruding knuckle of bowel took place and an abscess formed in connection with some of the stitches. After the tympany and active signs of intra-abdominal inflammation had subsided I endeavored to close with sutures the opening which had been made in the protruding portion of bowel. Two attempts were made to do this, but both of them failed because gas and feces forced their way through the opening, notwithstanding the presence of the sutures. The final result, therefore, was the production of an artificial anus in the intestine left stitched in the incision.

The anterior surface of the abdomen became the seat of a very painful and extensive eczema which caused the patient much pain, and gave us a great deal of annoyance. On January 11, 1896, I operated for the cure of artificial anus, although I thought the operation was likely to be much complicated by the difficulty of preventing infection from the eczematous skin.

Incision was made above and below the opening in the bowel; this was then detached from the abdominal wall and recent incisions of neighboring portions of intestine separated. During this stage of the operation my finger tore the bowel just above the artificial anus. Four inches of gut, which included this tear and the abnormal anus, were then resected and a circular suture of the intestine made with two rows of Lembert sutures of silk. No portion of the mesentery was removed, but the portion corresponding to the removed bowel was folded. A drainage-tube was introduced because of the probability of infection and the wound closed. The subsequent history of the case was unimportant, though there was some suppuration about the stitches, one or two of which were subjected to great tension because of the retraction of the belly wall at the seat of the

artificial anus. The patient recovered without special symptoms worthy of record.

Fecal Fistules resulting from Sloughing Hernia cured by Celiotomy and Intestinal Suture.

A woman, over 60 years of age, had been operated upon several years previously for strangulated femoral hernia on the right side. On examination at the Woman's Hospital I found a minute orifice in the right groin, from which a small amount of liquid feces escaped more or less continuously. The tissues around were irritated by the escaping fluid. The opening would only admit the end of a probe. I therefore concluded to attempt closure by making an elliptical incision around it, dissecting out the tissue at the edges and suturing the wound left by this procedure. After making the elliptical incision, the skin and fascia were dissected up, the mucous membrane lining the small opening in the intestine turned inward and catgut sutures inserted in such a way as to close the intestinal orifice. The edges of the integument were brought together by interrupted sutures of silk, and an occlusive dressing of iodoform and collodion was then applied.

The operation, however, was unsuccessful, and fecal matter soon began to ooze through the wound, which failed to unite. The patient became very much discouraged and had rather serious symptoms a couple of weeks after the operation from partial suppression of urine. This condition had no relation to the operation.

After getting her kidneys to act more satisfactorily, on November 15, 1895, which was four weeks after the operation just described, I made a four-inch incision in the median line of the abdomen between the pubes and the umbilicus, and elevated the pelvis so as to throw the intestines upward towards the diaphragm. A loop of small intes tine was found adherent to the edges of the internal femoral ring. The external opening through which feces had been escaping communicated with the interior of this loop of bowel. A piece of gauze was carried beneath the adherent coil, and the rest of the intestines protected as much as possible by pads of gauze. I carefully separated the bowel from the abdominal wall around the margin of ring, and drew it out of the incision. A double row of Lembert's sutures of silk was used to close the opening in the detached bowel. The line of suturing was made transverse to the long diameter of the gut in order to make as little constriction at that point as possible.

The fistulous opening was then cut out by transfixing the abdominal wall, after thorough cleansing of the excoriated surface of skin

around the site of the fistule. Catgut sutures were passed through the abdominal wall to close the opening, and the peritoneal surfaces beneath were drawn together by catgut sutures introduced from within the abdomen. The abdominal incision was then closed in the ordinary way with silk sutures. The convalescence was uninterrupted. The beneficial moral effect of the operation upon the patient was very marked.

I had intended to operate by the intra-abdominal route when she first came under my care, but was led to do the less serious operation by the exceedingly small orifice through which the contents of the bowel escaped.

A year and a half ago I operated upon a similar case in a feeble old woman of 64, who had had for about two years an artificial anus in the left groin due to a sloughing femoral hernia. An unsuccessful attempt to close this fistule was made, it was said, at the Presbyterian Hospital about fifteen months before I saw her at the Jewish Hospital. Fecal discharges occurred in small quantities almost constantly, and the woman seemed greatly depressed by this occurrence. Her age and feebleness made me hesitate for a long time to operate upon her. In October, 1894, however, I finally concluded that the risk was justifiable. The case was not one suitable for using the Dupuytren enterotome, as there seemed to be no special spur to be divided. A median incision was made and the patient put in the Trendelenburg position. The attachment of the bowel to the abdominal wall was much more extensive in this case than in the other. The fecal fistule was really sufficiently large to be called an artificial anus, for nearly all the contents of the bowel escaped here. This was quite different from the condition of the other patient, in whom nearly all the alvine evacuations passed through the normal route.

In both instances an effort was made to prevent contamination of the operative wound from the discharges coming from the fistule. In the present case I sewed the cutaneous margins of the fistule together over the orifice before making the median incision.

The gut, where attached to the abdominal wall, was encircled by a ligature which was drawn sufficiently tight to prevent the escape of feces into the abdomen when I detached the intestine from the neighborhood of the femoral ring. This was done because the opening was a large one and I feared fecal material would pour out into the peritoneal cavity. After the bowel was cut loose with the scissors, intestinal sutures were applied so as to close the opening in a transverse direction. The bowel was then dropped into the abdominal cavity.

This step of the operation left an opening in the anterior abdom-

inal wall at the site of the femoral canal lined with mucous membrane which had been left by cutting away the attached intestine on the inner side. The woman's condition was rather bad, and I, therefore, did not dissect out all this tissue and bring the raw sufaces in contact as in the first case. Some of the mucous membrane, however, was dissected away. The rest was allowed to remain and the opening closed spontaneously by nature's efforts. This portion of the operation I considered unsatisfactory because of the prolongation of convalescence. It would have been better if I had encircled the opening with an incision through the entire abdominal wall and brought the parts together so as to get primary union. This is easily done when the abdominal cavity is open, because the surgeon has access to both sides of the orifice.

In the other case this method was used satisfactorily. With a sponge pushed up against the internal orifice I was able to prevent wounding of the intestine when the knife was entered from the external surface, and also avoided contaminating the peritoneal cavity by secretions from the inflamed skin around the old artificial anus.

The intraperitoneal treatment of the conditions present in these three cases seems to me probably preferable, and much more effective than plastic operations done on the exterior of the abdomen or the use of the enterotome.